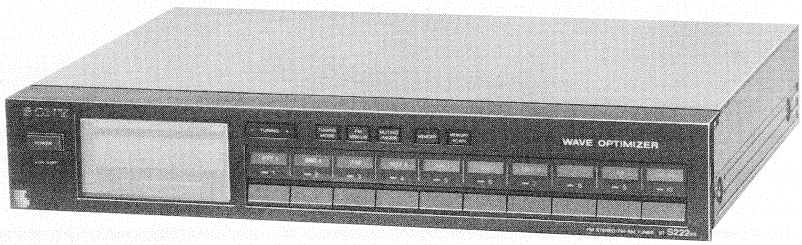
ST-S222ES

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

FM tuner section

Tuning range 87.5 MHz – 108 MHz

Antenna terminals
75 ohms, unbalanced

Intermediate frequency
10.7 MHz

	(at 40 kHz deviation)	
Sensitivity	at 46 dB quieting 17.3 dBf, 2 μV (mono) 37.9 dBf, 22.5 μV (stereo)	
Usable sensitivity	10.3 dBf, 0.9 μV (IHF) 0.8 μV (S/N = 26 dB)	
Signal-to-noise ratio	83 dB (mono) 79 dB (stereo)	
Harmonic distortion at 1 kHz	0.01% (mono) 0.03% (stereo)	
IM distortion	0.01% (mono) 0.03% (stereo)	
Separation at 1 kHz	58 dB	
Frequency response	40 Hz – 12.5 kHz ±0.2 dB 30 Hz – 15 kHz $^{+0.2}_{-0.5}$ dB	
Selectivity	at 400 kHz 60 dB	at 300 kHz 25 dB

Capture ratio 1.0 dB

AM suppression ratio
65 dB

Image response ratio
60 dB

IF response ratio
120 dB

Spurious response ratio
100 dB

RF intermodulation
65 dB (IHF), 80 dB (2.4 MHz)

Muting threshold
Approx. 30 dBf, 18 μV

Output level/impedance
at 75 kHz deviation
750 mV, 1.7 kilohms

— Continued on next page —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

FM STEREO/FM-AM TUNER

SONY®

AUD

MICROFILM

AM (MW/LW) tuner section

		AM (MW)	LW
Tuning range		531 – 1602 kHz (9 kHz step) 530 – 1610 kHz (10 kHz step)	153 – 344 kHz
Antenna		Layout-free AM antenna	
		External antenna terminal	
Intermediate frequency		450 kHz	
Usable sensitivity	Layout-free AM antenna	300 μV/m (at 999 or 1,000 kHz)	700 μV/m (at 230 kHz)
	External antenna	30 μV (at 999 or 1,000 kHz)	200 μV (at 230 kHz)
Signal-to-noise ratio		50 dB (50 mV/m)	
Harmonic distortion		0.5% (at 50 mV/m, 400 Hz)	
Selectivity		40 dB (9 kHz) 45 dB (10 kHz)	40 dB (9 kHz)

General

System PLL quartz-locked digital synthesizer system
FM stereo, FM/AM super-heterodyne tuner

Power requirements
AEP mode: 220 V ac (or 240 V ac adjustable by authorized Sony personnel), 50/60 Hz
UK model: 240 V ac (or 220 V ac adjustable by authorized Sony personnel), 50 Hz

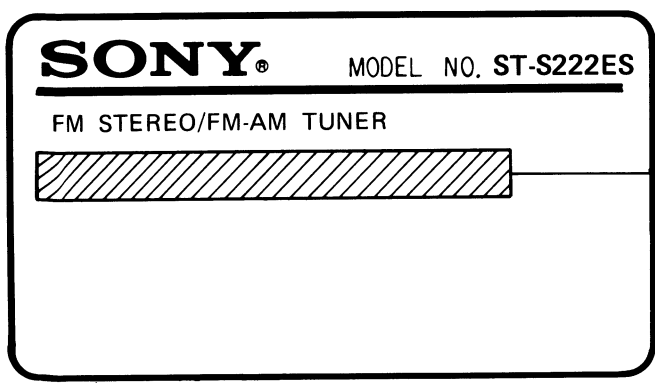
Power consumption
12 watts

Dimensions Approx. 430 × 80 × 340 mm (w/h/d) (17 × 3 1/4 × 10 7/8 inches) including projecting parts and controls

Weight Approx. 4.2 kg (9 lbs 4 oz)

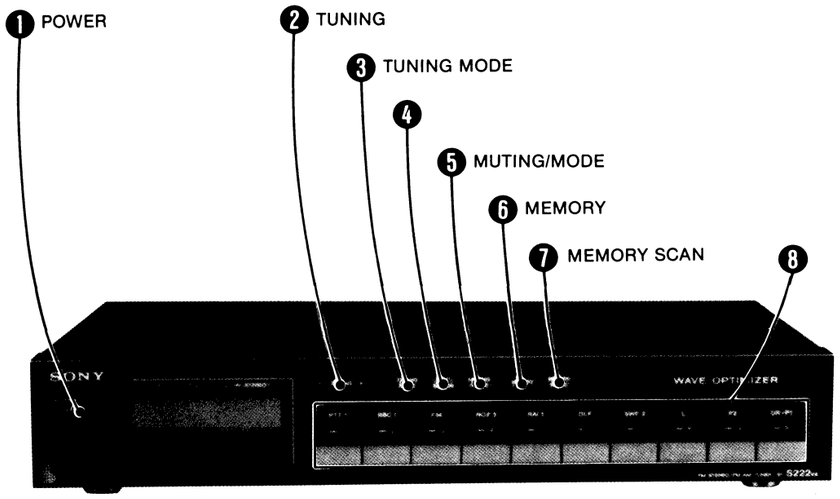
Accessories supplied
Ribbon antenna (1)
Connecting cord (1)
Layout-free AM antenna (1)
Station label (1 set)
Antenna connector (1)

– MODEL IDENTIFICATION –
(Specification Label)



AEP model: AC 220V ~ 50/60Hz 12W
UK model: AC 240V ~ 50/60Hz 12W

FUNCTION OF CONTROLS



❶ POWER switch
Depress to turn on the power. To turn the power off, press the switch again.

❷ TUNING button
Press the left side (–) to go to a lower frequency and the right side (+) to go to a higher.
During automatic tuning: Press to start automatic frequency scanning. The frequencies below or above that shown on the display window will be scanned automatically until a signal is received. To resume scanning, press the button again.
During manual tuning: Keep pressed to change the frequency continuously until the desired frequency is received. The frequency figures will change rapidly. Successively press and immediately release the button to change the frequency slowly.

❸ TUNING MODE button
Select a tuning system — MANUAL or AUTO.
The selected tuning system will be indicated in the display window.

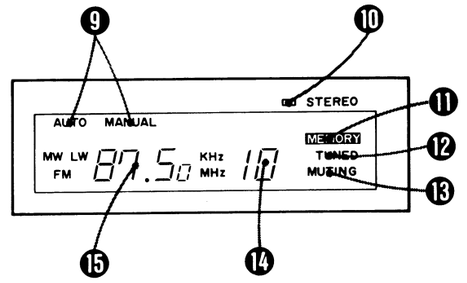
❹ Band selector
Selects the desired band: FM or MW, LW. The selected band will be indicated in the display window.

❺ MUTING/MODE button
This button serves the dual purpose of an FM mode and FM muting switch. Normally press this button so that the MUTING indicator illuminates to eliminate FM interstation noise while tuning from station to station. To tune in very weak FM station, press this button again so that MUTING indicator goes off. FM station is received in monaural mode.

❻ MEMORY button
Press to operate memory circuit. The MEMORY indicator will appear in the display window for a few seconds indicating that the memory circuit is standing by.

❼ MEMORY SCAN button
Press to automatically scan the stations memorized on the station preset buttons.

❽ Station preset buttons and station identification windows
To call up a memorized station, press the appropriate button. Station labels (supplied) can be placed in these windows.



❾ Tuning mode indicators
The tuning system selected by the TUNING MODE button is displayed.

❿ STEREO indicator
This indicator will light when an FM stereo program of sufficient signal strength is tuned in with the MUTING/MODE button pressed.

⓫ MEMORY indicator
When the MEMORY button is pressed, the MEMORY indicator will appear for a few seconds indicating that the memory circuit is standing by.

⓬ TUNED indicator
This indicator illuminates when a sufficiently strong signal is tuned in.

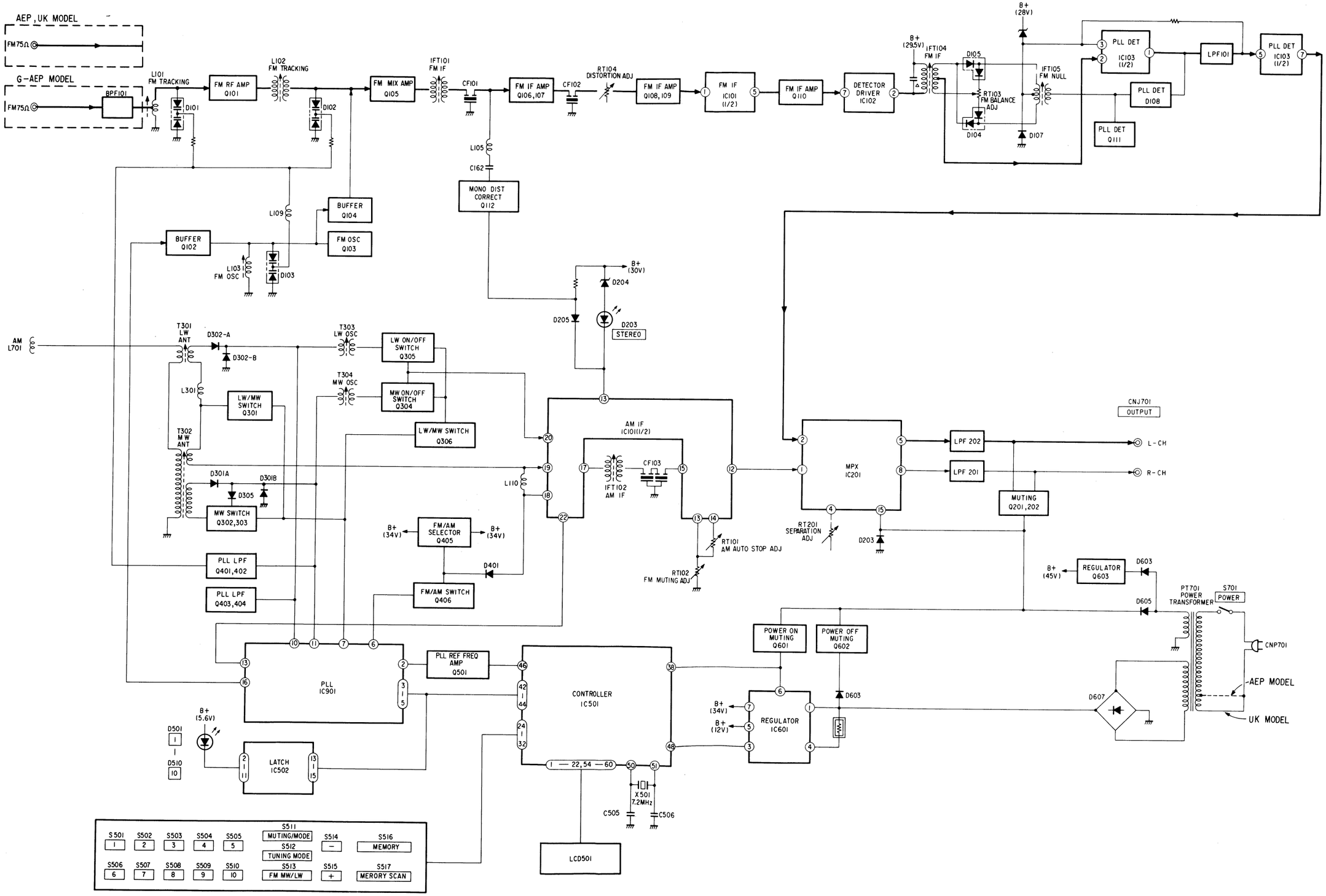
⓭ MUTING indicator
This indicator illuminates when the MUTING/MODE button is pressed in FM reception.

⓮ Station preset button indicator
When the station preset button is pressed, a figure from 1 to 10 corresponding to the pressed button will appear.

⓯ Band/frequency-display
Permits reading the received frequency at a glance from the figures.

SECTION 1
OUTLINE

1-1. BLOCK DIAGRAM



SECTION 2
DISASSEMBLY

TOP COVER REMOVAL

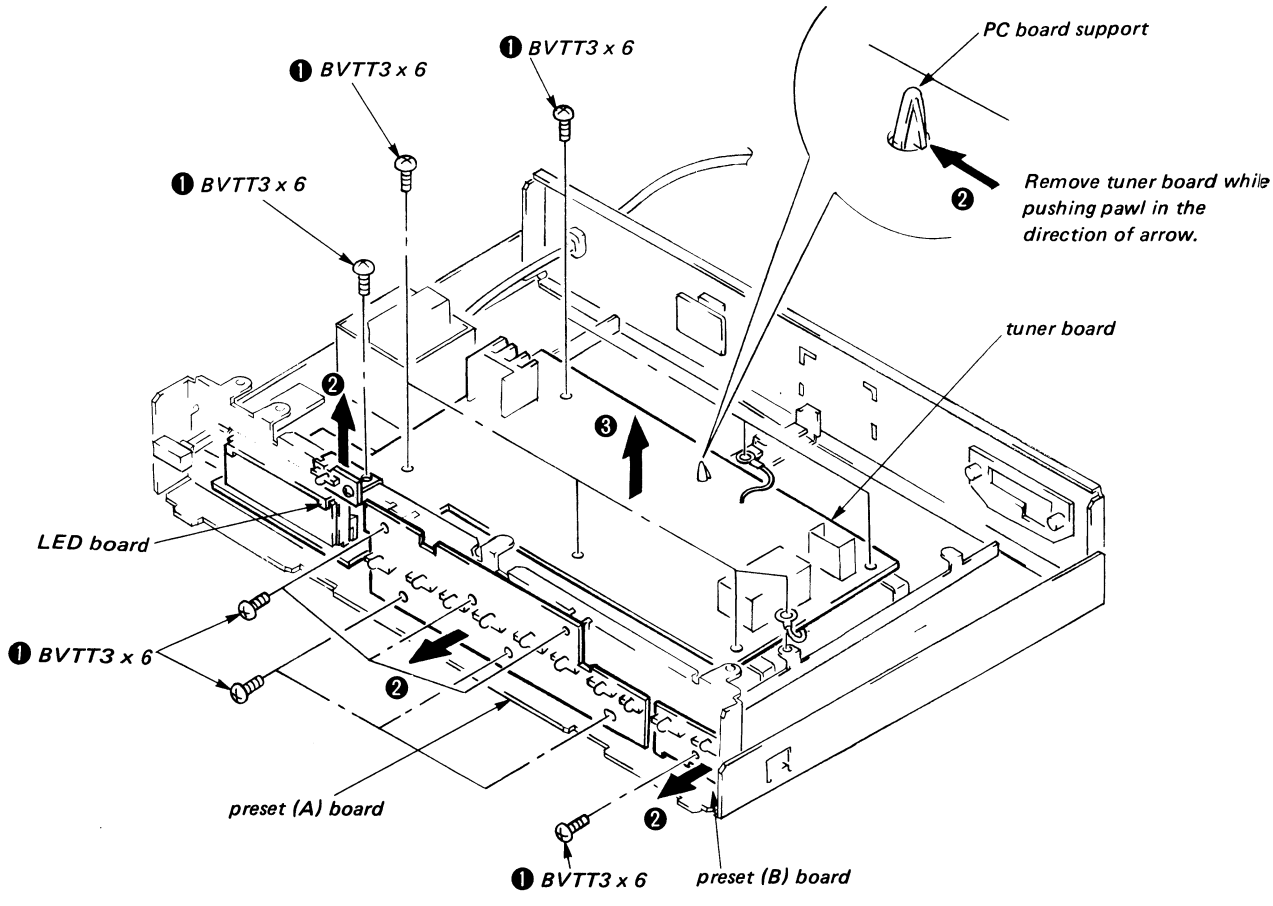
Remove four top cover screws.

FRONT PANEL REMOVAL

Remove six screws securing front panel.

Note: Follow the disassembly procedure in the numerical order given.

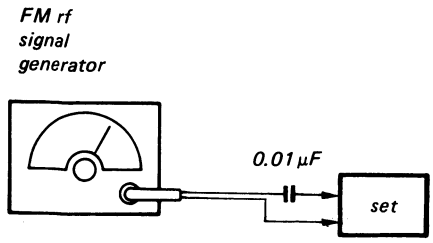
TUNER BOARD, PRESET BOARD (A/B), LED BOARD



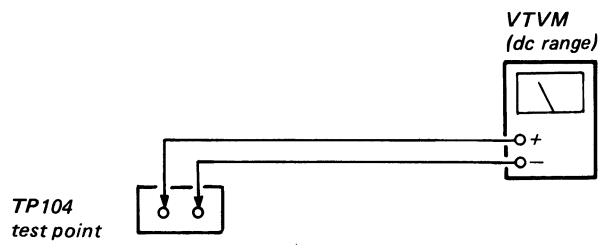
SECTION 3
ADJUSTMENTS

FM SECTION

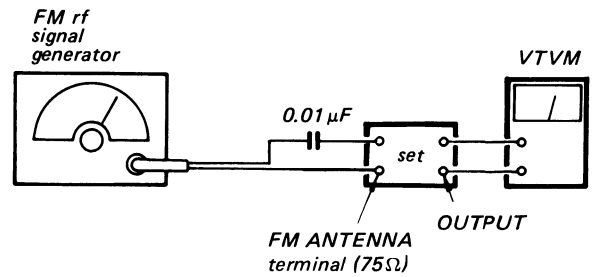
FM FREQUENCY COVERAGE ADJUSTMENT



frequency indication	reading on VOM	adjustment part
87.5MHz	2.1 ± 0.3V	L103
108.0MHz	8.0 ± 0.3V	CT103

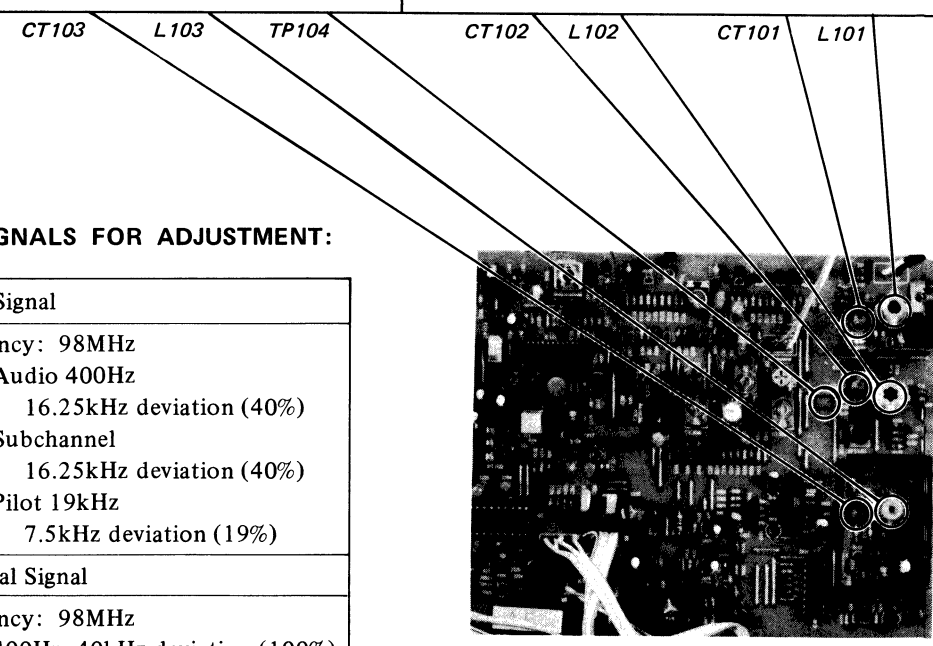


FM TRACKING ADJUSTMENT



1. Adjust for a maximum reading on VTVM.

frequency indication	adjustment part	VOM reading
87.5MHz	L101, L102	maximum
108.0MHz	CT101, CT102	maximum

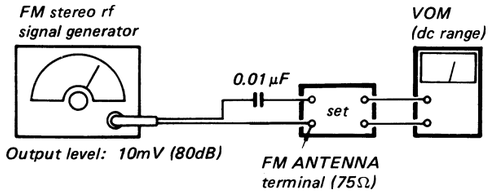


STANDARD SIGNALS FOR ADJUSTMENT:

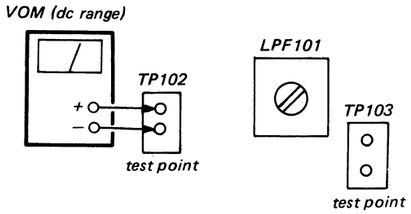
FM rf Stereo Signal
Carrier frequency: 98MHz Modulation: Audio 400Hz 16.25kHz deviation (40%) Subchannel 16.25kHz deviation (40%) Pilot 19kHz 7.5kHz deviation (19%)
FM rf Monaural Signal
Carrier frequency: 98MHz Modulation: 400Hz, 40kHz deviation (100%)

Discriminator Adjustment

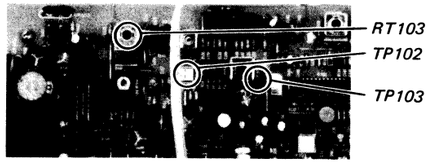
- **Procedure:**



A) BALANCE

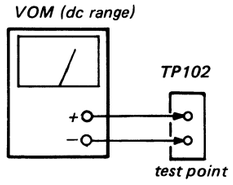


1. Turn FM rf signal generator off.
2. Short TP103.
3. Adjust RT103 so that VOM reads 0 ±50mV.



B) Primary Side (NULL)

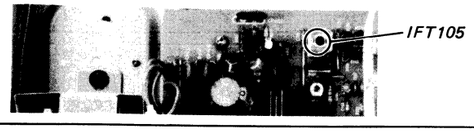
- **Procedure:**



Carrier frequency: 98MHz
Modulation: 1kHz
Output level: 10mV (80dB)

Note: Repeat primary and secondary adjustments two or three times.

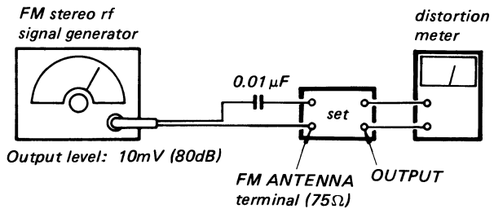
1. Detune the set by pushing the TUNING (+, –) button.
   Turn the core (primary side: Black) of IFT105 for 0V reading on VOM.



C) Secondary Side (DISTORTION)

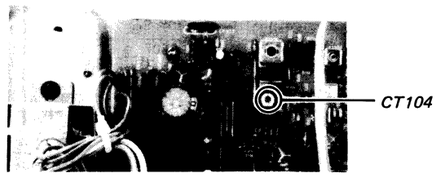
- **Procedure:**

IF BAND: WIDE
MODE: MONO/STEREO



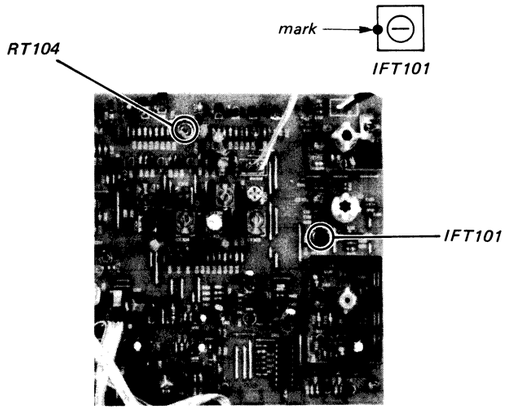
1. With MONO signal
   Adjust CT104 so that distortion meter reading becomes minimum (0.06% or less).

Note: Make sure null point after making this adjustment.



2. With STEREO signal (for confirming STEREO lamp lighting)
   Adjust RT104 so that distortion meter reading becomes minimum (0.09% or less).

Note: If specification is not met, turn IFT101 within range of ± 90° (turn after making mark with marker-pen or equivalent).

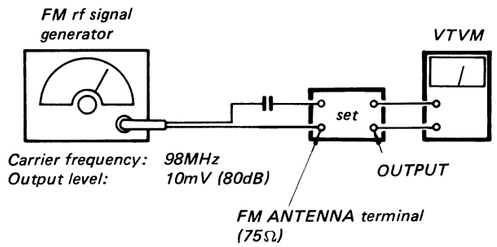


Muting Width Adjustment

- **Setting:**

MUTING/MODE switch: ON

- **Procedure:**



1. Tune in 98MHz by pressing TUNING (+, –) switches.
2. Adjust IFT103 so that MUTING lamp goes on.
3. Confirm that MUTING lamp goes on within receiving frequency of 57 – 65kHz.

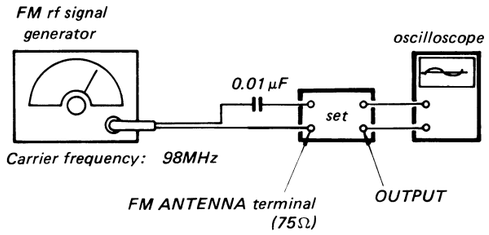
Note: Wait for about two minutes after turning the set on.

FM Muting Level Adjustment

- **Setting:**

IF BAND: WIDE

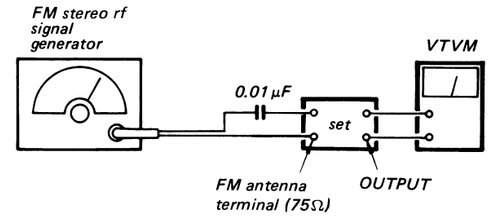
- **Procedure:**



1. MODE: MUTING ON
2. Tune in 98MHz by pressing TUNING (+, –) switches.
3. Adjust RT102 so that muting level becomes 24 ±3dB.

FM Stereo Separation Adjustment

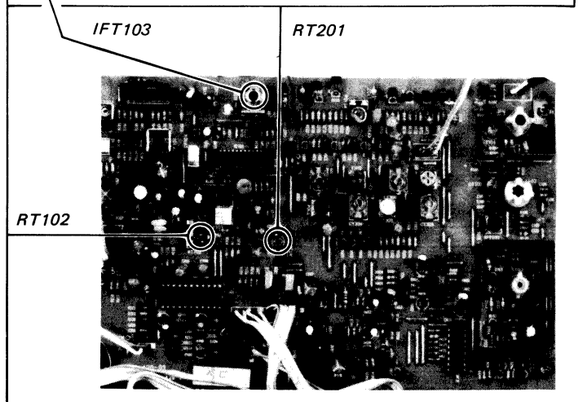
- **Procedure:**

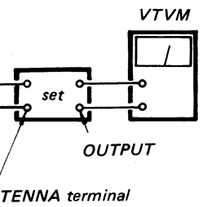


Carrier frequency: 98MHz
Output level: 10mV (80dB)
Modulation:
Audio (1kHz): 16.25kHz deviation (40.6%)
Pilot (19kHz): 7.5kHz deviation (18.8%)
Sub-channel (38kHz): 16.25kHz deviation (40.6%)

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RT201 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RT201 for minimum

L-CH Stereo separation: Ⓐ – Ⓑ
R-CH Stereo separation: Ⓒ – Ⓓ
The separations of both channels should be equal.

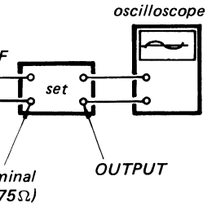




TUNING (+, –)

NG lamp goes on.
goes on within
Hz.

fter turning the set on.

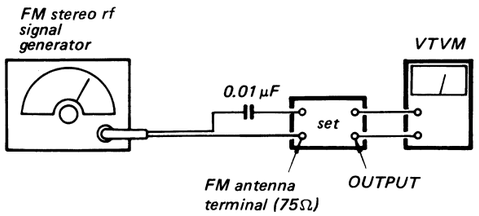


ing TUNING (+, –)

nuting level becomes

FM Stereo Separation Adjustment

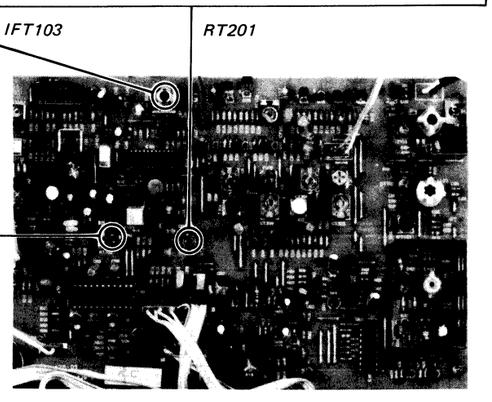
- **Procedure:**



Carrier frequency: 98MHz
Output level: 10mV (80dB)
Modulation:
Audio (1kHz): 16.25kHz deviation (40.6%)
Pilot (19kHz): 7.5kHz deviation (18.8%)
Sub-channel (38kHz): 16.25kHz deviation (40.6%)

FM stereo signal generator output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RT201 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RT201 for minimum

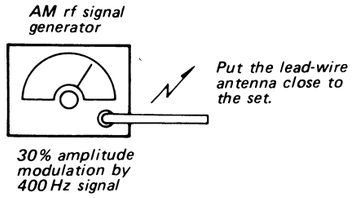
L-CH Stereo separation: Ⓐ – Ⓑ
R-CH Stereo separation: Ⓒ – Ⓓ
The separations of both channels should be equal.

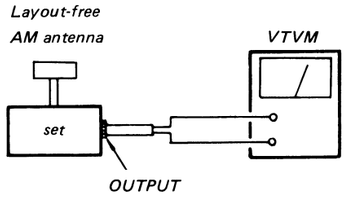


MW/LW SECTION

- **Setting:**

BAND SELECTOR switch: MW/LW

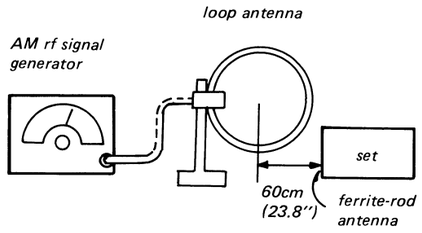




- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

MW/LW TUNED Level Adjustment

- **Procedure:**

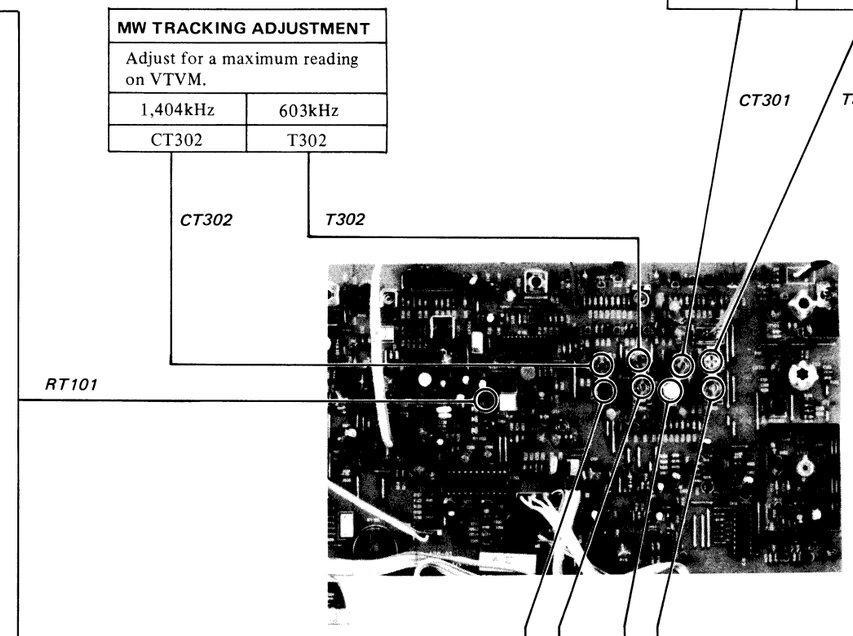


Carrier frequency: 999kHz (MW)
235kHz (LW)
30% amplitude modulation by 400Hz signal.

(MW) Adjust RT101 so that TUNED indicator goes on with signal strength of 58dB/m.
(LW) Confirm that TUNED indicator goes on with signal strength of 76dB/m.

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
1,404kHz	603kHz
CT302	T302

LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
310kHz	170kHz
CT301	T301



MW FREQUENCY COVERAGE ADJUSTMENT		
frequency indication	reading on VOM	adjustment part
531kHz	1.8 ± 0.2V	T304
1,602kHz	22 ± 0.2V	CT304

LW FREQUENCY COVERAGE ADJUSTMENT		
frequency indication	reading on VOM	adjustment part
344kHz	18.5 ± 0.2V	CT303
153kHz	2.2 ± 0.2V	T303

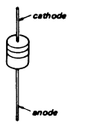
SECTION 4
DIAGRAMS

4-1. MOUNTING DIAGRAM

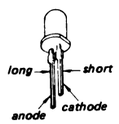
– Conductor Side –

- **Semiconductor Lead Layouts**

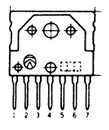
1SS202-1



GL-5NG6
GL-5PR21

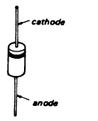


LA5665

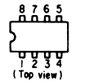


2SK241-Y

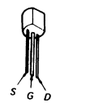
10E2



NJM4560D

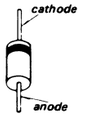


2SK30A-GR3
2SK125-3
2SK246-GR2

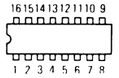


2SD774

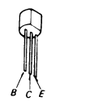
HZ30-2L
HZ4ALL
HZ6A3L
HZ7A3L



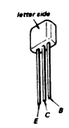
TC9172P
TC9174P



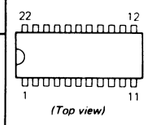
2SC710-13



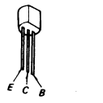
2SA1175



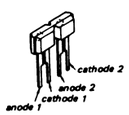
LA1265
LA3400



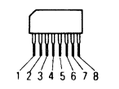
2SC535



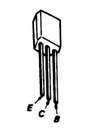
KV1226



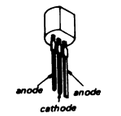
μPC1163H



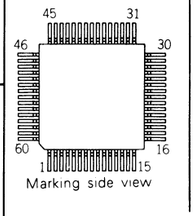
2SC634SP
2SC2603-F
2SC2995-0



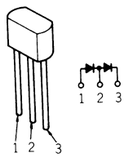
KV1320



TC9302F-008

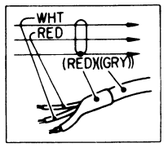


MC931



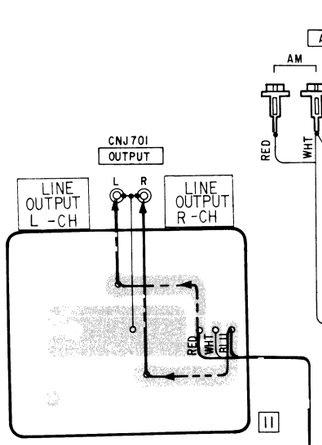
Note:

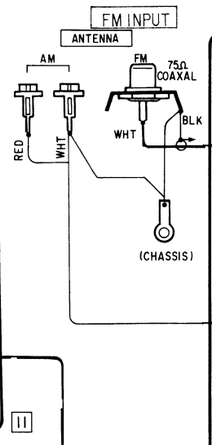
- Color code of sleeving over the end of the jacket.

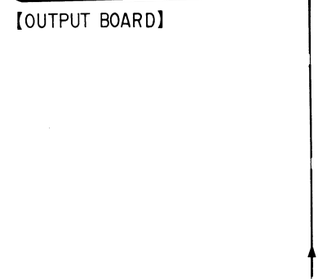


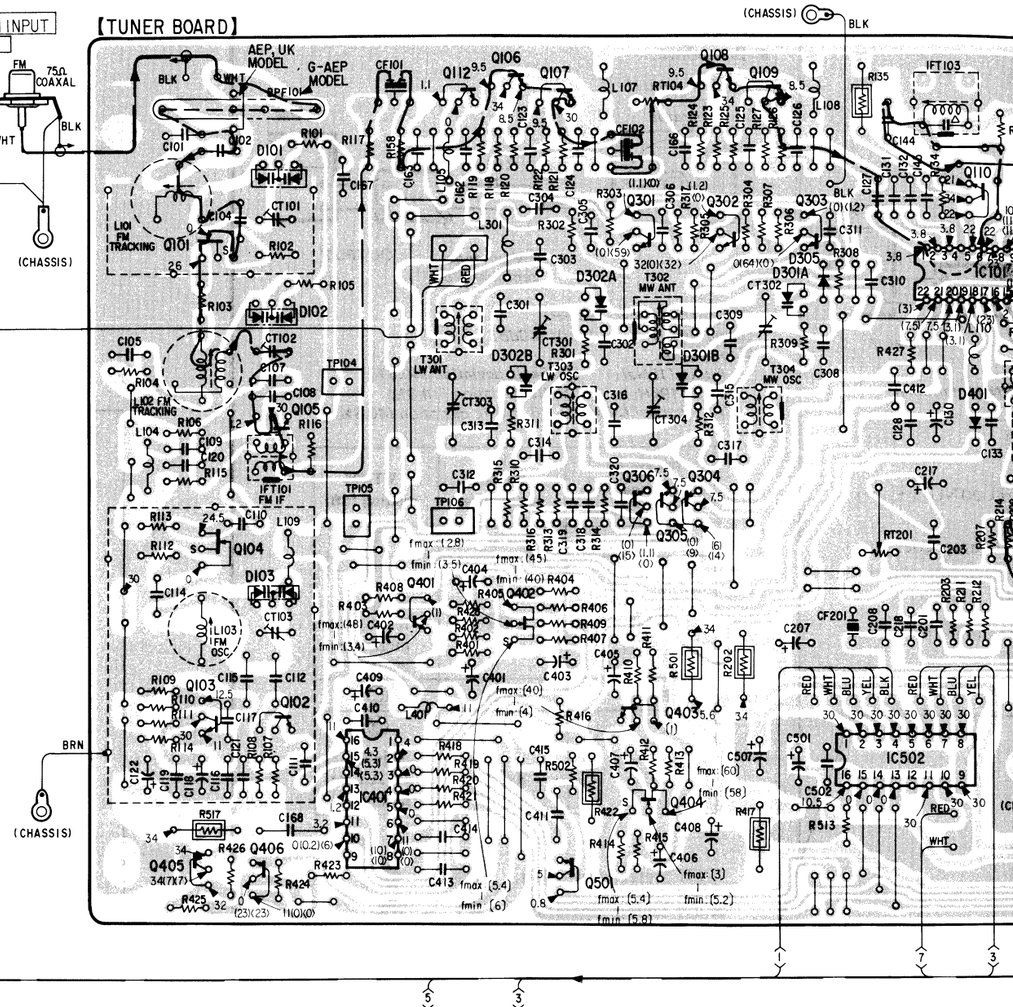
- ○— : parts extracted from the component side.
- ⬚ : indicates side identified with part number.
- —→— : signal path
- —·→— : L-CH signal path
- —··→— : R-CH signal path
- ▨ : B + pattern

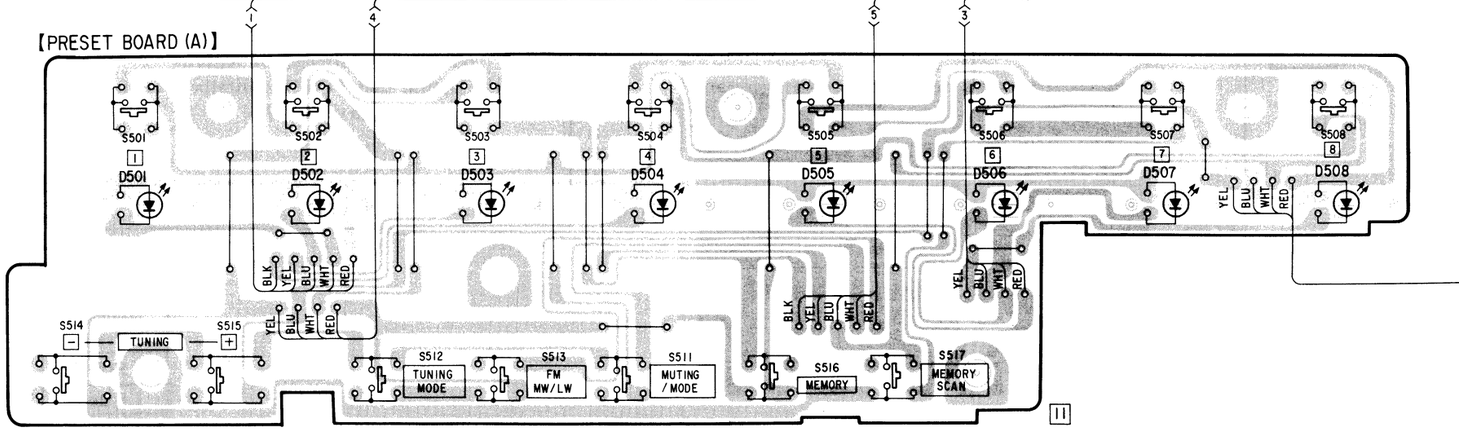
Q , IC	D
106,108 112,107,109,IC102	105
	605,606
	101,104 108
110	
301,302,303	607
101 IC101	
	305
IC103 111	302A,301A 102
	302B,301B
105	
	401,107,106
603,IC601	
306,305,304,202	
104	604
	103
602,601	603,607
201	601,602 608
IC201	
103,102,403	
	516,515 205,523,522 202,524,517 201,204
IC502	
IC401,404	513,514
	521,516,534 533,530 531,532
405,406,501	
IC501	526,527 528,529
	511
	512
	501,503,505,507 502,504,506,508 509,510
Q , IC	D











【TUNER BOARD】

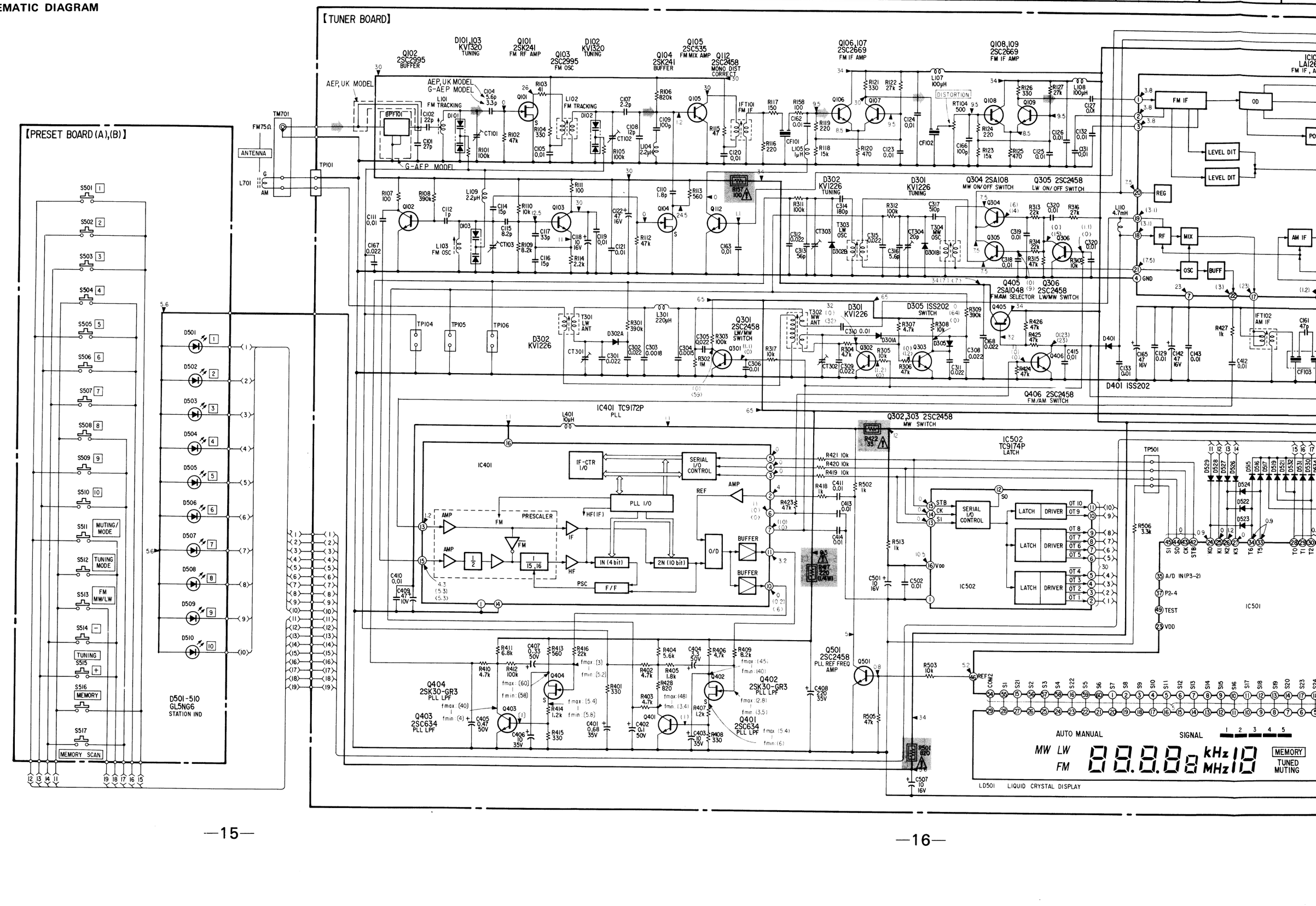
【PRESET BOARD (B)】

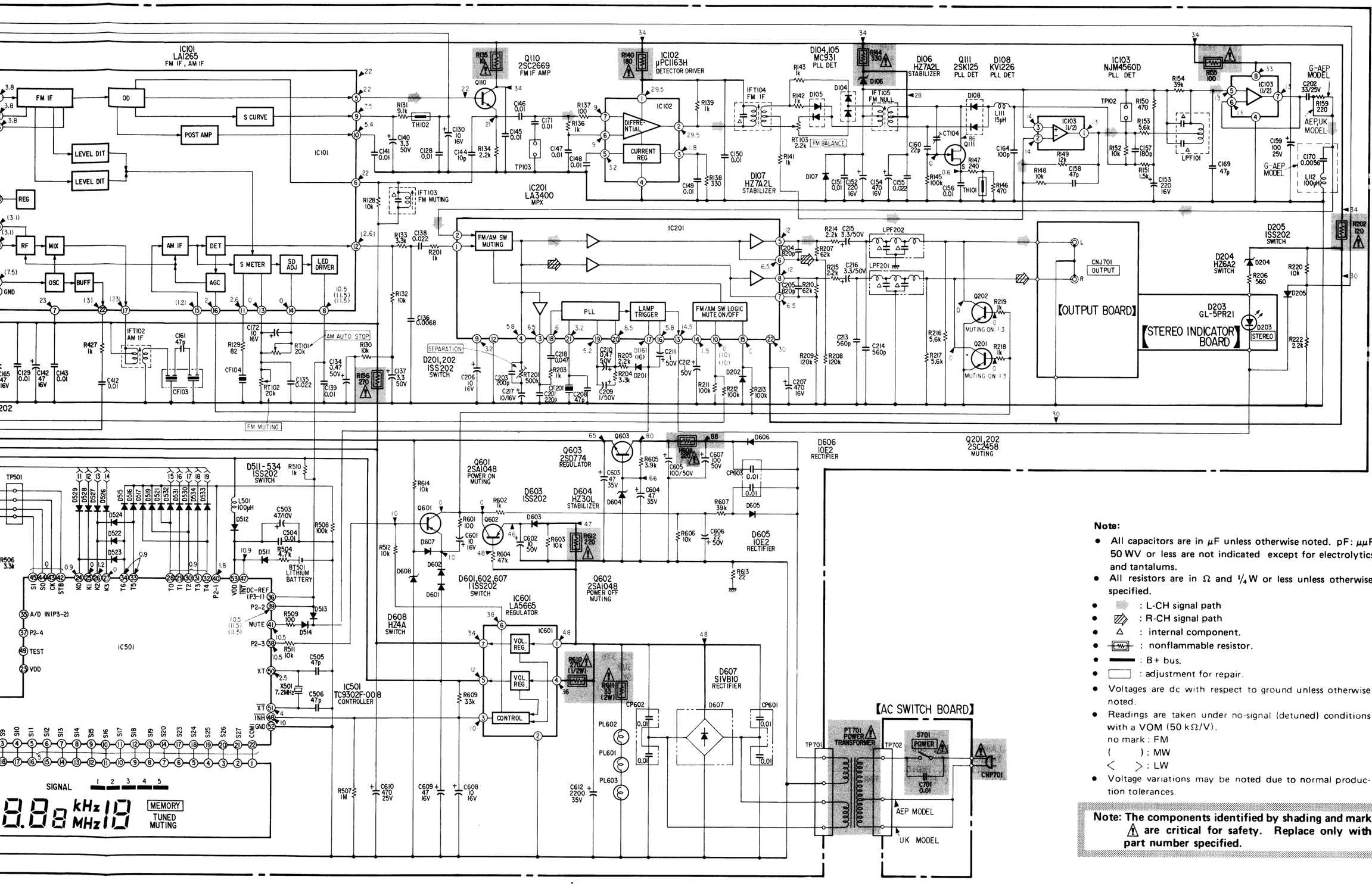
【AC SWITCH BOARD】

PT701 POWER TRANSFORMER

LCD501 LIQUID CRYSTAL DISPLAY

4-2. SCHEMATIC DIAGRAM





Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- : L-CH signal path
- : R-CH signal path
- △ : internal component.
- : nonflammable resistor.
- : B+ bus.
- : adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal (detuned) conditions with a VOM (50 kΩ/V).
  no mark : FM
  ( ) : MW
  < > : LW
- Voltage variations may be noted due to normal production tolerances.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

SECTION 5
EXPLODED VIEWS

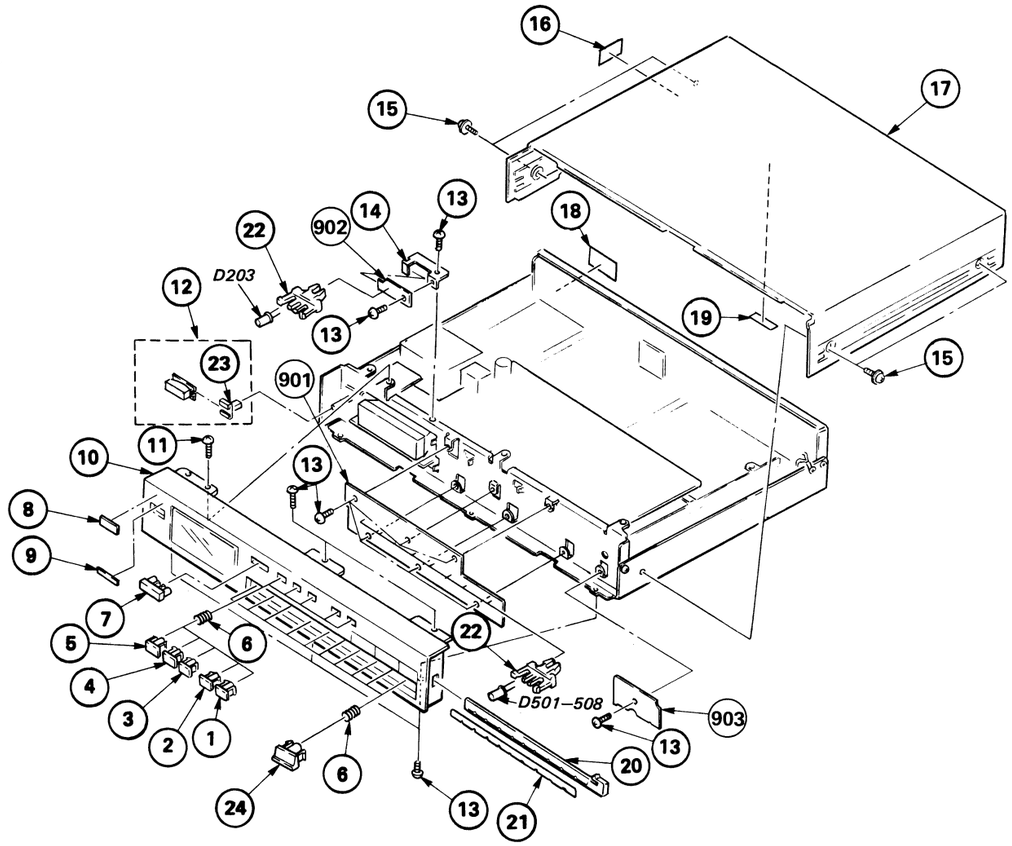
NOTE:
The mechanical parts with no reference number in the exploded views are not supplied.

· Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

· The construction parts of an assembled part are indicated with a collation number in the remark column.

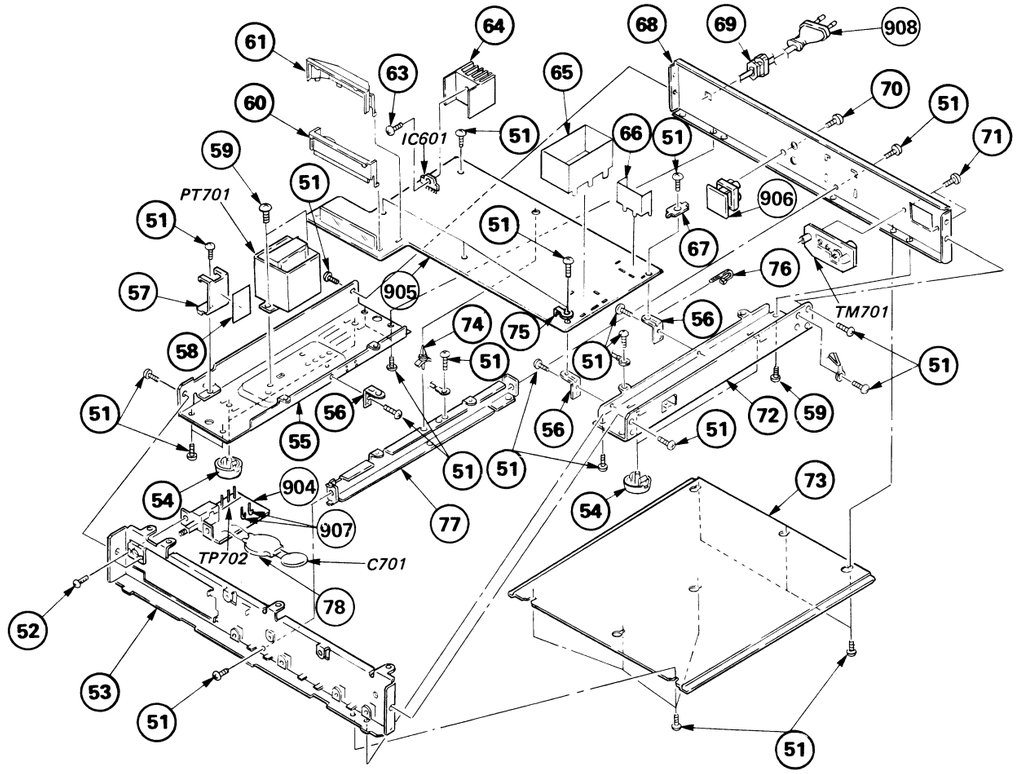
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

5-1.



No.	Part No.	Description	Remarks
1	4-886-004-61	KNOB (C), SQUARE	
2	4-886-004-51	KNOB (C), SQUARE	
3	4-886-004-41	KNOB (C), SQUARE	
4	4-886-004-71	KNOB (C), SQUARE	
5	4-886-004-21	KNOB (C), SQUARE	
6	4-886-032-00	SPRING, COMPRESSION	
7	4-886-003-00	KNOB, TUNING	
8	3-304-974-01	EMBLEM, SONY	
9	*4-911-312-01	(UK)...LABEL, MODEL NUMBER	
10	X-4911-302-1	PANEL	
11	3-703-108-21	SCREW +BV 3X6, S TIGHT	
12	X-4885-901-0	KNOB ASSY, POWER	23
13	7-685-751-09	SCREW +BVTT 3X6 (S)	
14	*4-911-323-01	BRACKET, LED	
15	4-889-321-11	SCREW	
16	3-703-845-01	(UK)...LABEL (N)(UK), MAIN CARTION	
17	4-886-026-31	COVER, TOP	
18	*4-911-310-01	(AEP).....LABEL, MODEL NUMBER	
	*4-911-310-11	(AEP).....LABEL, MODEL NUMBER	
	4-911-311-01	(G-AEP)...LABEL, MODEL NUMBER	
	4-911-312-01	(UK).....LABEL, MODEL NUMBER	
19	3-703-081-21	(UK)....LABEL (SIDE), SUB CAUTION	
20	4-911-319-01	HOLDER, INDICATOR	
21	*4-911-330-01	(UK).....LABEL (UK), INDICATOR	
	*4-911-331-01	(AEP,G-AEP)...LABEL (E), INDICATOR	
22	*4-905-210-01	HOLDER, LED	
23	4-866-342-00	JOINT (B), KNOB	
24	4-911-322-01	KNOB, PRESET	
901	*1-161-723-11	PC BOARD, PRESET (A)	
902	*1-616-727-11	PC BOARD, STEREO INDICATOR	
903	*1-161-724-11	PC BOARD, PRESET (B)	

5-2.



The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
51	7-685-751-09	SCREW +BVTT 3X6 (S)	
52	7-682-647-01	SCREW +PS 3X6	
53	*4-911-333-01	PANEL, SUB	
54	X-4864-303-0	FOOT ASSY	
55	*4-886-022-00	CHASSIS (LEFT)	
56	*4-911-324-01	BRACKET, PC BOARD	
57	*4-884-808-00	PROTECTOR	
58	9-911-863-XX	INSULATOR	
59	7-685-880-09	SCREW +BVTT 4X6 (S)	
60	*4-904-514-01	ILLUMINATOR	
61	*4-904-515-01	HOUSE, LAMP	
63	7-685-872-09	SCREW +BVTT 3X8 (S)	
64	*4-363-147-11	HEAT SINK, H.PIN	
65	*4-911-326-01	PLATE (B), SHIELD	
66	*4-911-325-01	PLATE (A), SHIELD	
67	*4-835-639-00	(AEP,UK)...PLATE, GROUND	
68	*4-886-095-21	PLATE, JACK	
69	3-703-244-00	BUSHING (2104), CORD	
70	3-703-473-01	(G-AEP).....SCREW, TERMINAL	
	7-685-646-79	(AEP,G-AEP)...SCREW +BVTP 3X8 TYPE2 N-S	
71	7-685-646-19	SCREW +BVTT 3X8 TYPE2 N-S	
72	*4-886-023-00	CHASSIS (RIGHT)	
73	*4-886-025-00	PLATE, BOTTOM	
74	*3-703-353-02	SUPPORT, PC BOARD	
75	4-870-539-00	PLATE, GROUND	
76	*3-701-748-00	CLAMP	
77	*4-886-015-00	REINFORCEMENT	
78	4-875-455-01	COVER (DIA. 20), CAPACITOR	
904	*1-616-726-12	PC BOARD, AC SWITCH	
905	*A-4351-472-A	(AEP,UK)...MOUNTED PCB, TUNER	
	*A-4351-474-A	(G-AEP)....MOUNTED PCB, TUNER	
906	*1-616-725-11	PC BOARD, OUTPUT	
907	1-535-416-00	TERMINAL	
908	⚠1-555-795-00	(AEP,G-AEP)...CORD, POWER	
	⚠1-556-035-11	(UK).....CORD, POWER	
PT701	⚠1-448-273-11	TRANSFORMER, POWER	
TM701	1-536-851-11	TERMINAL BOARD (ANT)	
TP702	*1-535-140-00	BASE POST 19MM (10MM PITCH) 3P	

NOTE:
· Items marked "
they are seldo
service. Some
pated when ord

· If there are tw
set such as a s
typical circuit
capacitors and
circuits may be

ELECT

Ref.No.	Part No.
901	*1-161-723-
902	*1-616-727-
903	*1-161-724-
904	*1-616-726-
905	*A-4351-472
905	*A-4351-474
906	*1-616-725-
907	1-535-416-
908	⚠.1-555-795-
908	⚠.1-556-035-
BPF101	1-235-631-
BT501	1-528-120-
C101	1-162-209-
C102	1-162-207-
C104	1-162-193-
C104	1-162-196-
C105	1-162-306-
C107	1-162-191-
C108	1-162-201-
C109	1-162-282-
C110	1-162-190-
C111	1-162-306-
C112	1-162-187-
C114	1-162-189-
C115	1-162-198-
C116	1-162-203-
C117	1-162-211-
C118	1-123-356-
C119	1-162-306-
C120	1-162-306-
C121	1-162-306-
C122	1-123-332-
C123	1-162-306-
C124	1-162-306-
C125	1-162-306-
C126	1-162-306-
C127	1-162-306-
C128	1-162-306-
C129	1-162-306-
C130	1-123-356-
C131	1-162-306-
C132	1-162-306-
C133	1-162-306-

SECTION 6
ELECTRICAL PARTS LIST

NOTE:
- Items marked " ★ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF:µF, PF:µµF.

RESISTORS
- All resistors are in ohms.
- F : nonflammable

COILS
- MMH : mH, UH : µH

SEMICONDUCTORS
In each case, U : µ, for example:
UA...: µA..., UPA...: µPA..., UPC...: µPC, UPD...: µPD...

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*1-161-723-11	PC BOARD, PRESET (A)			
902	*1-616-727-11	PC BOARD, STEREO INDICATOR			
903	*1-161-724-11	PC BOARD, PRESET (B)			
904	*1-616-726-12	PC BOARD, AC SWITCH			
905	*A-4351-472-A	(AEP,UK)...MOUNTED PCB, TUNER			
905	*A-4351-474-A	(G-AEP)....MOUNTED PCB, TUNER			
906	*1-616-725-11	PC BOARD, OUTPUT			
907	1-535-416-00	TERMINAL			
908	⚠1-555-795-00	(AEP,G-AEP)...CORD, POWER			
908	⚠1-556-035-11	(UK).....CORD, POWER			
BPF101	1-235-631-11	(G-AEP)...FILTER, BAND PASS			
BT501	1-528-120-00	BATTERY, LITHIUM (CR-2025)			
C101	1-162-209-31	CERAMIC	27PF	5%	50V
C102	1-162-207-31	CERAMIC	22PF	5%	50V
C104	1-162-193-11	(G-AEP)....CERAMIC	3.3PF	10%	50V
C104	1-162-196-31	(AEP,UK)...CERAMIC	5.6PF	10%	50V
C105	1-162-306-31	CERAMIC	0.01MF	20%	16V
C107	1-162-191-31	CERAMIC	2.2PF	10%	50V
C108	1-162-201-31	CERAMIC	12PF	5%	50V
C109	1-162-282-31	CERAMIC	100PF	10%	50V
C110	1-162-190-31	CERAMIC	1.8PF	20%	50V
C111	1-162-306-31	CERAMIC	0.01MF	20%	16V
C112	1-162-187-31	CERAMIC	1PF	20%	50V
C114	1-162-189-31	CERAMIC	1.5PF	20%	50V
C115	1-162-198-31	CERAMIC	8.2PF	10%	50V
C116	1-162-203-31	CERAMIC	15PF	5%	50V
C117	1-162-211-31	CERAMIC	33PF	5%	50V
C118	1-123-356-00	ELECT	10MF	20%	16V
C119	1-162-306-31	CERAMIC	0.01MF	20%	16V
C120	1-162-306-31	CERAMIC	0.01MF	20%	16V
C121	1-162-306-31	CERAMIC	0.01MF	20%	16V
C122	1-123-332-00	ELECT	47MF	20%	16V
C123	1-162-306-31	CERAMIC	0.01MF	20%	16V
C124	1-162-306-31	CERAMIC	0.01MF	20%	16V
C125	1-162-306-31	CERAMIC	0.01MF	20%	16V
C126	1-162-306-31	CERAMIC	0.01MF	20%	16V
C127	1-162-306-31	CERAMIC	0.01MF	20%	16V
C128	1-162-306-31	CERAMIC	0.01MF	20%	16V
C129	1-162-306-31	CERAMIC	0.01MF	20%	16V
C130	1-123-356-00	ELECT	10MF	20%	16V
C131	1-162-306-31	CERAMIC	0.01MF	20%	16V
C132	1-162-306-31	CERAMIC	0.01MF	20%	16V
C133	1-162-306-31	CERAMIC	0.01MF	20%	16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C134	1-123-610-00	ELECT	0.47MF	20%	50V
C135	1-101-005-00	CERAMIC	0.022MF		50V
C136	1-106-192-00	MYLAR	0.0068MF	5%	50V
C137	1-123-613-00	ELECT	3.3MF	20%	50V
C138	1-108-587-00	MYLAR	0.022MF	5%	50V
C139	1-162-306-31	CERAMIC	0.01MF	20%	16V
C140	1-123-613-00	ELECT	3.3MF	20%	50V
C141	1-162-306-31	CERAMIC	0.01MF	20%	16V
C142	1-123-332-00	ELECT	47MF	20%	16V
C143	1-162-306-31	CERAMIC	0.01MF	20%	16V
C144	1-101-978-00	CERAMIC	10PF	0.5PF	50V
C145	1-162-306-31	CERAMIC	0.01MF	20%	16V
C146	1-162-306-31	CERAMIC	0.01MF	20%	16V
C147	1-162-306-31	CERAMIC	0.01MF	20%	16V
C148	1-162-306-31	CERAMIC	0.01MF	20%	16V
C149	1-162-306-31	CERAMIC	0.01MF	20%	16V
C150	1-162-306-31	CERAMIC	0.01MF	20%	16V
C151	1-162-306-31	CERAMIC	0.01MF	20%	16V
C152	1-123-321-00	ELECT	220MF	20%	16V
C153	1-123-321-00	ELECT	220MF	20%	16V
C154	1-123-323-00	ELECT	470MF	20%	16V
C155	1-101-005-00	CERAMIC	0.022MF		50V
C156	1-162-306-31	CERAMIC	0.01MF	20%	16V
C157	1-162-285-31	CERAMIC	180PF	10%	50V
C158	1-162-215-31	CERAMIC	47PF	5%	50V
C159	1-123-345-00	ELECT	100MF	20%	25V
C160	1-161-283-00	CERAMIC	22PF	5%	50V
C161	1-162-215-31	CERAMIC	47PF	5%	50V
C162	1-162-306-31	CERAMIC	0.01MF	20%	16V
C163	1-162-306-31	CERAMIC	0.01MF	20%	16V
C164	1-162-282-31	CERAMIC	100PF	10%	50V
C165	1-123-332-00	ELECT	47MF	20%	16V
C166	1-162-282-31	CERAMIC	100PF	10%	50V
C167	1-101-005-00	CERAMIC	0.022MF		50V
C168	1-161-494-11	CERAMIC	0.022MF	30%	25V
C169	1-162-215-11	CERAMIC	47P	5%	50V
C170	1-108-573-91	(G-AEP)...MYLAR	0.0056MF	5%	50V
C171	1-162-306-31	CERAMIC	0.01MF	20%	16V
C172	1-123-356-00	ELECT	10MF	20%	16V
C173	1-101-005-00	CERAMIC	0.022MF		50V
C201	1-162-286-31	CERAMIC	220PF	10%	50V
C202	1-124-180-51	ELECT	33MF	20%	25V
C203	1-104-060-00	POLYSTYRENE	200PF	5%	50V
C204	1-104-075-00	POLYSTYRENE	820PF	5%	50V
C205	1-104-075-00	POLYSTYRENE	820PF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C206	1-123-356-00	ELECT	10MF	20%	16V
C207	1-123-323-00	ELECT	470MF	20%	16V
C208	1-162-215-31	CERAMIC	47PF	5%	50V
C209	1-123-611-00	ELECT	1MF	20%	50V
C210	1-123-610-00	ELECT	0.47MF	20%	50V
C211	1-123-611-00	ELECT	1MF	20%	50V
C212	1-123-611-00	ELECT	1MF	20%	50V
C213	1-103-719-11	POLYSTYRENE	560PF	5%	50V
C214	1-103-719-11	POLYSTYRENE	560PF	5%	50V
C215	1-123-613-00	ELECT	3.3MF	20%	50V
C216	1-123-613-00	ELECT	3.3MF	20%	50V
C217	1-123-356-00	ELECT	10MF	20%	16V
C218	1-108-595-00	MYLAR	0.047MF	5%	50V
C301	1-102-951-00	CERAMIC	15PF	5%	50V
C302	1-101-005-00	CERAMIC	0.022MF		50V
C303	1-103-731-00	POLYSTYRENE	0.0018MF	5%	50V
C304	1-104-081-00	POLYSTYRENE	0.0015MF	5%	50V
C305	1-101-005-00	CERAMIC	0.022MF		50V
C306	1-162-306-31	CERAMIC	0.01MF	20%	16V
C308	1-101-005-00	CERAMIC	0.022MF		50V
C309	1-101-005-00	CERAMIC	0.022MF		50V
C310	1-162-306-31	CERAMIC	0.01MF	20%	16V
C311	1-101-005-00	CERAMIC	0.022MF		50V
C312	1-101-005-00	CERAMIC	0.022MF		50V
C313	1-102-730-00	CERAMIC	56PF	5%	50V
C314	1-103-707-00	POLYSTYRENE	180PF	5%	50V
C315	1-101-005-00	CERAMIC	0.022MF		50V
C316	1-162-196-31	CERAMIC	5.6PF	10%	50V
C317	1-104-070-00	POLYSTYRENE	510PF	5%	50V
C318	1-162-306-31	CERAMIC	0.01MF	20%	16V
C319	1-162-306-31	CERAMIC	0.01MF	20%	16V
C320	1-162-306-31	CERAMIC	0.01MF	20%	16V
C401	1-131-346-00	TANTALUM	0.68MF	10%	35V
C402	1-123-607-00	ELECT	0.1MF	20%	50V
C403	1-123-356-00	ELECT	10MF	20%	35V
C404	1-123-613-00	ELECT	3.3MF	20%	50V
C405	1-123-610-00	ELECT	0.47MF	20%	50V
C406	1-123-356-00	ELECT	10MF	20%	35V
C407	1-123-609-00	ELECT	0.33MF	20%	50V
C408	1-123-346-00	ELECT	220MF	20%	35V
C409	1-123-306-00	ELECT	47MF	20%	10V
C410	1-162-306-31	CERAMIC	0.01MF	20%	16V
C411	1-162-306-31	CERAMIC	0.01MF	20%	16V
C412	1-162-306-31	CERAMIC	0.01MF	20%	16V
C413	1-162-306-31	CERAMIC	0.01MF	20%	16V
C414	1-162-306-31	CERAMIC	0.01MF	20%	16V
C415	1-162-306-31	CERAMIC	0.01MF	20%	16V
C501	1-123-356-00	ELECT	10MF	20%	16V
C502	1-162-306-31	CERAMIC	0.01MF	20%	16V
C503	1-123-306-00	ELECT	47MF	20%	10V
C504	1-162-306-31	CERAMIC	0.01MF	20%	16V
C505	1-162-215-31	CERAMIC	47PF	5%	50V
C506	1-162-215-31	CERAMIC	47PF	5%	50V
C507	1-123-356-00	ELECT	10MF	20%	16V
C601	1-123-356-00	ELECT	10MF	20%	16V
C602	1-123-816-00	ELECT	10MF	20%	50V
C603	1-123-359-00	ELECT	47MF	20%	35V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C604	1-123-359-00	ELECT	47MF	20%	35V
C605	1-123-360-00	ELECT	100MF	20%	50V
C606	1-123-357-00	ELECT	22MF	20%	50V
C607	1-123-360-00	ELECT	100MF	20%	50V
C608	1-123-356-00	ELECT	10MF	20%	16V
C609	1-123-332-00	ELECT	47MF	20%	16V
C610	1-123-336-00	ELECT	470MF	20%	25V
C612	1-123-350-00	ELECT	2200MF	20%	35V
C701	⚠1-161-744-00	CERAMIC	0.01MF		400V
CF101	1-567-498-00	FILTER, CERAMIC			
CF102	1-567-498-00	FILTER, CERAMIC			
CF103	1-527-937-00	FILTER, CERAMIC			
CF104	1-527-981-00	FILTER, CERAMIC			
CF201	1-567-286-11	OSCILLATOR, CERAMIC			
CNJ701	1-507-912-11	JACK, PIN 2P (OUTPUT)			
CP601	1-102-394-00	CERAMIC	0.01MF		250V
CP602	1-102-394-00	CERAMIC	0.01MF		250V
CP603	1-102-394-00	CERAMIC	0.01MF		250V
CT101	1-141-264-00	CAP, TRIMMER			
CT102	1-141-264-00	CAP, TRIMMER			
CT103	1-141-264-00	CAP, TRIMMER			
CT104	1-141-232-00	CAP, TRIMMER			
CT301	1-141-171-00	CAP, TRIMMER 20P			
CT302	1-141-171-00	CAP, TRIMMER 20P			
CT303	1-141-171-00	CAP, TRIMMER 20P			
CT304	1-141-171-00	CAP, TRIMMER 20P			
D101	8-719-901-59	DIODE KV1320			
D102	8-719-901-59	DIODE KV1320			
D103	8-719-901-59	DIODE KV1320			
D104	8-719-000-12	DIODE MC931			
D105	8-719-000-12	DIODE MC931			
D106	8-719-910-73	DIODE HZ7A3L			
D107	8-719-910-73	DIODE HZ7A3L			
D108	8-719-912-27	DIODE KV1226			
D201	8-719-107-94	DIODE 1SS202-1			
D202	8-719-107-94	DIODE 1SS202-1			
D203	8-719-906-59	DIODE GL-5PR21			
D204	8-719-910-63	DIODE HZ6A3L			
D205	8-719-107-94	DIODE 1SS202-1			
D301	8-719-912-27	DIODE KV1226			
D302	8-719-912-27	DIODE KV1226			
D305	8-719-107-94	DIODE 1SS202-1			
D401	8-719-107-94	DIODE 1SS202-1			
D501	8-719-905-06	DIODE GL-5NG6			
D502	8-719-905-06	DIODE GL-5NG6			
D503	8-719-905-06	DIODE GL-5NG6			
D504	8-719-905-06	DIODE GL-5NG6			
D505	8-719-905-06	DIODE GL-5NG6			
D506	8-719-905-06	DIODE GL-5NG6			
D507	8-719-905-06	DIODE GL-5NG6			
D508	8-719-905-06	DIODE GL-5NG6			
D509	8-719-905-06	DIODE GL-5NG6			
D510	8-719-905-06	DIODE GL-5NG6			
D512	8-719-107-94	DIODE 1SS202-1			
D513	8-719-107-94	DIODE 1SS202-1			
D514	8-719-107-94	DIODE 1SS202-1			

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
D515	8-719-107-94	DIODE 1SS202-1
D516	8-719-107-94	DIODE 1SS202-1
D517	8-719-107-94	DIODE 1SS202-1
D518	8-719-107-94	DIODE 1SS202-1
D519	8-719-107-94	DIODE 1SS202-1
D520	8-719-107-94	DIODE 1SS202-1
D521	8-719-107-94	DIODE 1SS202-1
D522	8-719-107-94	DIODE 1SS202-1
D523	8-719-107-94	DIODE 1SS202-1
D524	8-719-107-94	DIODE 1SS202-1
D525	8-719-107-94	DIODE 1SS202-1
D526	8-719-107-94	DIODE 1SS202-1
D527	8-719-107-94	DIODE 1SS202-1
D528	8-719-107-94	DIODE 1SS202-1
D529	8-719-107-94	DIODE 1SS202-1
D530	8-719-107-94	DIODE 1SS202-1
D531	8-719-107-94	DIODE 1SS202-1
D532	8-719-107-94	DIODE 1SS202-1
D533	8-719-107-94	DIODE 1SS202-1
D534	8-719-107-94	DIODE 1SS202-1
D604	8-719-913-02	DIODE HZ30-2L
D605	8-719-200-02	DIODE 10E2
D606	8-719-200-02	DIODE 10E2
D607	8-719-107-94	DIODE 1SS202-1
D608	8-719-914-11	DIODE HZ4ALL
IC102	8-759-111-63	IC UPC1163H
IC103	8-759-745-60	IC NJM4560D
IC101	8-759-801-81	IC LA1265
IC201	8-759-801-20	IC LA3400
IC401	8-759-202-63	IC TC9172P
IC501	8-759-206-18	IC TC9302F-008
IC502	8-759-202-07	IC TC9174P
IC601	8-759-801-79	IC LA5665
IFT101*	1-404-363-00	TRANSFORMER, IF
IFT102	1-404-413-00	TRANSFORMER, IF
IFT103	1-404-637-11	TRANSFORMER, IF
IFT104	1-404-592-11	COIL, FM DET (1)
IFT105	1-404-595-11	COIL, FM DET (2)
L101	1-459-617-11	COIL
L102	1-426-249-11	COIL (RF)
L103	1-459-618-11	COIL
L104	1-410-013-11	MICRO INDUCTOR 2.2UH
L105	1-410-009-11	MICRO INDUCTOR 1UH
L107	1-410-033-11	MICRO INDUCTOR 100UH
L108	1-410-033-11	MICRO INDUCTOR 100UH
L109	1-408-555-00	MICRO INDUCTOR 2.2UH
L110	1-408-215-00	MICRO INDUCTOR 4.7MMH
L111	1-410-023-21	MICRO INDUCTOR 15UH
L112	1-408-575-21	(G-AEP)...MICRO INDUCTOR 100UH
L301	1-408-579-00	MICRO INDUCTOR 220UH
L401	1-408-563-00	MICRO INDUCTOR 10UH
L501	1-410-033-11	MICRO INDUCTOR 100UH
LCD501	1-806-874-31	INDICATOR, L-CRYSTAL LT5056
LPF101	1-235-061-00	ENCAPSULATED COMPONENT
LPF201	1-235-164-00	FILTER, LOW PASS
LPF202	1-235-164-00	FILTER, LOW PASS

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
PL601	1-518-576-31	LAMP, PILOT
PL602	1-518-576-31	LAMP, PILOT
PL603	1-518-576-31	LAMP, PILOT
⚠PT701	.1-448-273-11	TRANSFORMER, POWER
Q101	8-729-200-55	TRANSISTOR 2SK241-Y
Q102	8-729-201-93	TRANSISTOR 2SC2995-0
Q103	8-729-201-93	TRANSISTOR 2SC2995-0
Q104	8-729-200-55	TRANSISTOR 2SK241-Y
Q105	8-729-353-52	TRANSISTOR 2SC535
Q106	8-729-671-13	TRANSISTOR 2SC710-13
Q107	8-729-671-13	TRANSISTOR 2SC710-13
Q108	8-729-671-13	TRANSISTOR 2SC710-13
Q109	8-729-671-13	TRANSISTOR 2SC710-13
Q110	8-729-671-13	TRANSISTOR 2SC710-13
Q111	8-729-802-43	TRANSISTOR 2SK125-3
Q112	8-729-606-33	TRANSISTOR 2SC2603-F
Q201	8-729-606-33	TRANSISTOR 2SC2603-F
Q202	8-729-606-33	TRANSISTOR 2SC2603-F
Q301	8-729-606-33	TRANSISTOR 2SC2603-F
Q302	8-729-606-33	TRANSISTOR 2SC2603-F
Q303	8-729-606-33	TRANSISTOR 2SC2603-F
Q304	8-729-117-54	TRANSISTOR 2SA1175
Q305	8-729-606-33	TRANSISTOR 2SC2603-F
Q306	8-729-606-33	TRANSISTOR 2SC2603-F
Q401	8-729-600-27	TRANSISTOR 2SC634SP
Q402	8-729-203-05	TRANSISTOR 2SK30A-GR3
Q403	8-729-600-27	TRANSISTOR 2SC634SP
Q404	8-729-201-56	TRANSISTOR 2SK246-GR2
Q405	8-729-117-54	TRANSISTOR 2SA1175
Q406	8-729-606-33	TRANSISTOR 2SC2603-F
Q501	8-729-606-33	TRANSISTOR 2SC2603-F
Q601	8-729-117-54	TRANSISTOR 2SA1175
Q602	8-729-117-54	TRANSISTOR 2SA1175
Q603	8-729-177-43	TRANSISTOR 2SD774

R101	1-247-879-00	CARBON	100K	5%	1/6W
R102	1-247-871-00	CARBON	47K	5%	1/6W
R103	1-247-799-00	CARBON	47	5%	1/6W
R104	1-247-819-00	CARBON	330	5%	1/6W
R105	1-247-879-00	CARBON	100K	5%	1/6W
R106	1-247-901-00	CARBON	820K	5%	1/6W
R107	1-247-807-00	CARBON	100	5%	1/6W
R108	1-247-893-00	CARBON	390K	5%	1/6W
R109	1-247-853-00	CARBON	8.2K	5%	1/6W
R110	1-249-429-11	CARBON	10K	5%	1/6W
R111	1-247-807-00	CARBON	100	5%	1/6W
R112	1-247-871-00	CARBON	47K	5%	1/6W
R113	1-247-825-00	CARBON	560	5%	1/6W
R114	1-249-421-11	CARBON	2.2K	5%	1/6W
R115	1-247-799-00	CARBON	47	5%	1/6W
R116	1-247-815-00	CARBON	220	5%	1/6W
R117	1-247-811-00	CARBON	150	5%	1/6W
R118	1-247-859-00	CARBON	15K	5%	1/6W
R119	1-247-815-00	CARBON	220	5%	1/6W
R120	1-247-823-00	CARBON	470	5%	1/6W
R121	1-247-819-00	CARBON	330	5%	1/6W
R122	1-249-434-11	CARBON	27K	5%	1/6W
R123	1-247-859-00	CARBON	15K	5%	1/6W
R124	1-247-815-00	CARBON	220	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R125	1-247-823-00	CARBON	470	5%	1/6W	
R126	1-247-819-00	CARBON	330	5%	1/6W	
R127	1-249-434-11	CARBON	27K	5%	1/6W	
R128	1-249-429-11	CARBON	10K	5%	1/6W	
R129	1-247-805-00	CARBON	82	5%	1/6W	
R130	1-249-429-11	CARBON	10K	5%	1/6W	
R131	1-247-854-00	CARBON	9.1K	5%	1/6W	
R132	1-249-429-11	CARBON	10K	5%	1/6W	
R133	1-247-843-00	CARBON	3.3K	5%	1/6W	
R134	1-249-421-11	CARBON	2.2K	5%	1/6W	
R135 ⚠	1-247-083-00	CARBON	10	5%	1/4W	F
R136	1-247-831-00	CARBON	1K	5%	1/6W	
R137	1-247-807-00	CARBON	100	5%	1/6W	
R138	1-247-819-00	CARBON	330	5%	1/6W	
R139	1-247-831-00	CARBON	1K	5%	1/6W	
R140 ⚠	1-247-113-00	CARBON	180	5%	1/4W	F
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R142	1-247-831-00	CARBON	1K	5%	1/6W	
R143	1-247-831-00	CARBON	1K	5%	1/6W	
R144 ⚠	1-247-119-00	CARBON	330	5%	1/4W	F
R145	1-247-879-00	CARBON	100K	5%	1/6W	
R146	1-247-823-00	CARBON	470	5%	1/6W	
R147	1-247-816-00	CARBON	240	5%	1/6W	
R148	1-249-429-11	CARBON	10K	5%	1/6W	
R149	1-247-857-00	CARBON	12K	5%	1/6W	
R150	1-247-823-00	CARBON	470	5%	1/6W	
R151	1-249-419-11	CARBON	1.5K	5%	1/6W	
R152	1-249-429-11	CARBON	10K	5%	1/6W	
R153	1-247-849-00	CARBON	5.6K	5%	1/6W	
R154	1-247-869-00	CARBON	39K	5%	1/6W	
R155 ⚠	1-247-107-00	CARBON	100	5%	1/4W	F
R156 ⚠	1-247-117-00	CARBON	270	5%	1/4W	F
R157 ⚠	1-247-107-00	CARBON	100	5%	1/4W	F
R158	1-247-807-00	CARBON	100	5%	1/6W	
R159	1-247-815-81	(G-AEP)...CARBON	220	5%	1/6W	
R201	1-247-831-00	CARBON	1K	5%	1/6W	
R202 ⚠	1-247-109-00	CARBON	120	5%	1/4W	F
R203	1-247-831-00	CARBON	1K	5%	1/6W	
R204	1-247-843-00	CARBON	3.3K	5%	1/6W	
R205	1-249-421-11	CARBON	2.2K	5%	1/6W	
R206	1-247-825-00	CARBON	560	5%	1/6W	
R207	1-247-874-00	CARBON	62K	5%	1/6W	
R208	1-247-881-00	CARBON	120K	5%	1/6W	
R209	1-247-881-00	CARBON	120K	5%	1/6W	
R210	1-247-874-00	CARBON	62K	5%	1/6W	
R211	1-247-879-00	CARBON	100K	5%	1/6W	
R212	1-247-879-00	CARBON	100K	5%	1/6W	
R213	1-247-879-00	CARBON	100K	5%	1/6W	
R214	1-249-421-11	CARBON	2.2K	5%	1/6W	
R215	1-249-421-11	CARBON	2.2K	5%	1/6W	
R216	1-247-849-00	CARBON	5.6K	5%	1/6W	
R217	1-247-849-00	CARBON	5.6K	5%	1/6W	
R218	1-247-831-00	CARBON	1K	5%	1/6W	
R219	1-247-831-00	CARBON	1K	5%	1/6W	
R220	1-249-429-11	CARBON	10K	5%	1/6W	
R221	1-249-429-11	CARBON	10K	5%	1/6W	
R222	1-249-421-11	CARBON	2.2K	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R301	1-247-893-00	CARBON	390K	5%	1/6W	
R302	1-247-903-00	CARBON	1M	5%	1/6W	
R303	1-247-879-00	CARBON	100K	5%	1/6W	
R304	1-247-847-00	CARBON	4.7K	5%	1/6W	
R305	1-249-429-11	CARBON	10K	5%	1/6W	
R306	1-247-871-00	CARBON	47K	5%	1/6W	
R307	1-247-847-00	CARBON	4.7K	5%	1/6W	
R308	1-249-429-11	CARBON	10K	5%	1/6W	
R309	1-247-893-00	CARBON	390K	5%	1/6W	
R310	1-249-429-11	CARBON	10K	5%	1/6W	
R311	1-247-879-00	CARBON	100K	5%	1/6W	
R312	1-247-879-00	CARBON	100K	5%	1/6W	
R313	1-247-863-00	CARBON	22K	5%	1/6W	
R314	1-247-863-00	CARBON	22K	5%	1/6W	
R315	1-247-871-00	CARBON	47K	5%	1/6W	
R316	1-249-434-11	CARBON	27K	5%	1/6W	
R317	1-249-429-11	CARBON	10K	5%	1/6W	
R401	1-247-819-00	CARBON	330	5%	1/6W	
R402	1-247-847-00	CARBON	4.7K	5%	1/6W	
R403	1-247-847-00	CARBON	4.7K	5%	1/6W	
R404	1-247-849-00	CARBON	5.6K	5%	1/6W	
R405	1-247-837-00	CARBON	1.8K	5%	1/6W	
R406	1-247-847-00	CARBON	4.7K	5%	1/6W	
R407	1-247-833-00	CARBON	1.2K	5%	1/6W	
R408	1-247-819-00	CARBON	330	5%	1/6W	
R409	1-247-853-00	CARBON	8.2K	5%	1/6W	
R410	1-247-847-00	CARBON	4.7K	5%	1/6W	
R411	1-247-851-00	CARBON	6.8K	5%	1/6W	
R412	1-247-879-00	CARBON	100K	5%	1/6W	
R413	1-247-825-00	CARBON	560	5%	1/6W	
R414	1-247-833-00	CARBON	1.2K	5%	1/6W	
R415	1-247-819-00	CARBON	330	5%	1/6W	
R416	1-247-863-00	CARBON	22K	5%	1/6W	
R417 ⚠	1-247-115-00	CARBON	220	5%	1/4W	F
R418	1-247-831-00	CARBON	1K	5%	1/6W	
R419	1-249-429-11	CARBON	10K	5%	1/6W	
R420	1-249-429-11	CARBON	10K	5%	1/6W	
R421	1-249-429-11	CARBON	10K	5%	1/6W	
R422 ⚠	1-247-095-00	CARBON	33	5%	1/4W	F
R423	1-247-871-00	CARBON	47K	5%	1/6W	
R424	1-247-871-00	CARBON	47K	5%	1/6W	
R425	1-247-871-00	CARBON	47K	5%	1/6W	
R426	1-247-871-00	CARBON	47K	5%	1/6W	
R427	1-247-831-00	CARBON	1K	5%	1/6W	
R428	1-247-829-00	CARBON	820	5%	1/6W	
R501 ⚠	1-247-129-00	CARBON	820	5%	1/4W	F
R502	1-247-831-00	CARBON	1K	5%	1/6W	
R503	1-249-429-11	CARBON	10K	5%	1/6W	
R504	1-247-847-00	CARBON	4.7K	5%	1/6W	
R505	1-247-871-00	CARBON	47K	5%	1/6W	
R506	1-247-843-00	CARBON	3.3K	5%	1/6W	
R507	1-247-903-00	CARBON	1M	5%	1/6W	
R508	1-247-879-00	CARBON	100K	5%	1/6W	
R509	1-247-807-00	CARBON	100	5%	1/6W	
R510	1-247-831-00	CARBON	1K	5%	1/6W	
R511	1-249-429-11	CARBON	10K	5%	1/6W	
R512	1-249-429-11	CARBON	10K	5%	1/6W	

ELECTRICAL PARTS

Ref.No.	Part No.	Description				
R513	1-247-831-00	CARBON	1K	5%	1/6W	
R601	1-247-807-00	CARBON	100	5%	1/6W	
R602	1-247-831-00	CARBON	1K	5%	1/6W	
R603	1-249-429-11	CARBON	10K	5%	1/6W	
R604	1-247-871-00	CARBON	47K	5%	1/6W	
R605	1-247-845-00	CARBON	3.9K	5%	1/6W	
R606	1-249-429-11	CARBON	10K	5%	1/6W	
R607	1-247-869-00	CARBON	39K	5%	1/6W	
R608 ⚠	1-247-115-00	CARBON	220	5%	1/4W	F
R609	1-247-867-00	CARBON	33K	5%	1/6W	
R610 ⚠	1-247-226-00	CARBON	270	5%	1/2W	F
R611 ⚠	1-206-475-11	METAL OXIDE	33	5%	2W	F
R612 ⚠	1-247-115-00	CARBON	220	5%	1/4W	F
R613	1-247-791-00	CARBON	22	5%	1/6W	
R614	1-249-429-11	CARBON	10K	5%	1/6W	
RT101	1-226-237-00	RES, ADJ, CARBON 20K				
RT102	1-226-237-00	RES, ADJ, CARBON 20K				
RT103	1-228-991-00	RES, ADJ, CARBON 2.2K				
RT104	1-226-232-00	RES, ADJ, CARBON 500				
RT201	1-226-241-00	RES, ADJ, CARBON 500K				
S501	1-554-303-21	SWITCH, KEY BOARD (1)				
S502	1-554-303-21	SWITCH, KEY BOARD (2)				
S503	1-554-303-21	SWITCH, KEY BOARD (3)				
S504	1-554-303-21	SWITCH, KEY BOARD (4)				
S505	1-554-303-21	SWITCH, KEY BOARD (5)				
S506	1-554-303-21	SWITCH, KEY BOARD (6)				
S507	1-554-303-21	SWITCH, KEY BOARD (7)				
S508	1-554-303-21	SWITCH, KEY BOARD (8)				
S509	1-554-303-21	SWITCH, KEY BOARD (9)				
S510	1-554-303-21	SWITCH, KEY BOARD (10)				
S511	1-554-303-21	SWITCH, KEY BOARD (MUTING MODE)				
S512	1-554-303-21	SWITCH, KEY BOARD (TUNING/MODE)				
S513	1-554-303-21	SWITCH, KEY BOARD (FM MW/LW)				
S514	1-553-739-21	SWITCH, KEY BOARD (TUNING -)				
S515	1-553-739-21	SWITCH, KEY BOARD (TUNING +)				
S516	1-554-303-21	SWITCH, KEY BOARD (MEMORY)				
S517	1-554-303-21	SWITCH, KEY BOARD (MEMORY SCAN)				
S701 ⚠	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)				
T301	1-402-081-11	COIL, ANT (LW)				
T302	1-402-080-11	COIL, ANT (MW)				
T303	1-405-914-00	COIL, LW OSC				
T304	1-405-927-00	COIL, MW OSC				

ELECTRICAL PARTS

Ref.No.	Part No.	Description
TH101	1-800-199-00	THERMISTOR
TH102	1-800-198-XX	THERMISTOR S-1K
TM701	1-536-851-11	TERMINAL BOARD (ANT)
TP101	*1-535-115-00	TERMINAL
TP102	*1-560-060-00	PIN, CONNECTOR 2P
TP103	*1-560-060-00	PIN, CONNECTOR 2P
TP104	*1-560-060-00	PIN, CONNECTOR 2P
TP105	*1-560-060-00	PIN, CONNECTOR 2P
TP106	*1-560-060-00	PIN, CONNECTOR 2P
TP501	*1-560-062-00	PIN, CONNECTOR 4P
TP701	*1-535-117-00	TERMINAL
TP702	*1-535-140-00	BASE POST 19MM (10MM PITCH) 3P
X501	1-567-125-00	VIBRATOR, CRYSTAL

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-402-082-11	ANTENNA, FERRITE-ROD (LW/MW)
1-417-090-00	TRANSFORMER, ANTENNA MATCHING
1-501-224-00	ANTENNA, FEEDER
1-551-734-11	CORD, CONNECTION (RK-74A)
3-701-630-00	BAG, POLYETHYLENE
3-703-710-01	STICKER, SONY SYMBOL (12)
3-703-752-01	(UK ONLY)...LABEL (UK1), DISTRIBUTION
3-760-636-11	MANUAL, INSTRUCTION
4-858-078-00	SHEET, PROTECTION
4-886-071-01	CUSHION, LOWER
4-886-072-01	CUSHION, UPPER
4-911-303-01	(AEP,G-AEP)...LABEL (EP1), INDICATOR
4-911-304-01	(AEP,G-AEP)...LABEL (EP2), INDICATOR
4-911-305-01	(UK)...LABEL (UK), INDICATOR
*4-911-310-01	LABEL, MODEL NUMBER (AE1)
*4-911-310-11	LABEL, MODEL NUMBER (AE1)
*4-911-335-00	SPACER
4-911-337-01	INDIVIDUAL CARTON

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